Breathtaking lightning storm over Mattoon, Illinois. Photo by Melinda L. Swinford

July 2015

Moon phases are Universal Time (UT)

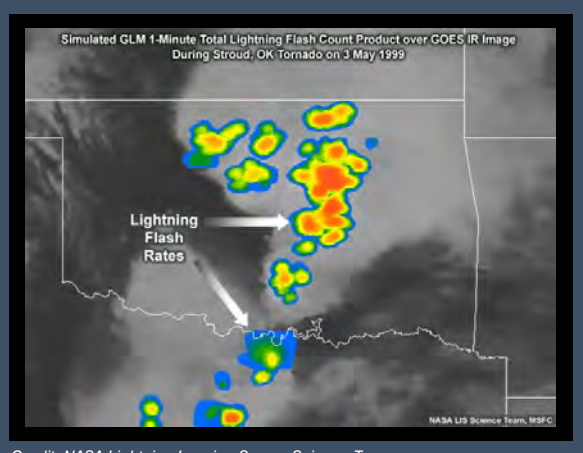
NEW MOON · FIRST QUARTER · FULL MOON · LAST QUARTER

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
JUNE S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	AUGUST S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31		1	2	3	4 U.S. Independence Day
5	6 Aphelion	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23 GOES-M launched, 2001	24	25
26	27	28	29	30	31	

Detecting lightning

The Geostationary Lightning Mapper (GLM) on the GOES-R series will detect and map total lightning activity, which includes both cloud-to-ground and cloud-to-cloud lightning, over the Western Hemisphere and adjacent ocean regions. This data will help severe weatherforecasters identify rapidly intensifying thunderstorms and issue accurate and timely storm warnings. In addition, GLM measurements can provide early warning of lightning ground strike hazards, better detection and short range forecasts of heavy rainfall and flash flooding, and improved ability to monitor intensification/decay of severe storms.

Simulated GLM one-minute total lightning flash count product over GOES infrared image during a tornado in Stroud, Oklahoma, on May 3, 1999.



Credit: NASA Lightning Imaging Sensor Science Team, Marshall Space Flight Center